

ARSET SHOT AF

ALKALI FREE LIQUID SHOTCRETE ADMIXTURE

Product Definition

ARSET SHOT AF is a liquid set accelerator for wet sprayed concrete production.

Technical Properties

Chemical Base	Special inorganic compounds mix
Color, Appearance	Beige
pH value	1 - 4
Density	1,46 ± 0,03 g/L
Alkaline Content (%)	< 1 (TS EN 480-12)
Compliance with Standards	TS EN 934-2

Advantages

- Increases early strength of concrete
- Low rebound
- Provides layer thickness up to 30 cm with one application
- Becomes easy overhead spraying because improved the bond of the shotcrete to the rock and concrete
- ARSET SHOT AF is chloride free and thus, does not harm steel or iron reinforcements

Area of Use

- Tunnels and galleries
- Rock and slope stabilization
- Overhead applications
- Shotcrete applications with high early strength properties
- Permanent shotcrete applications

Usage Dosage

ARSET SHOT AF is applied at one time and for layers up to 15 cm thick, dosage is used between 3.0-7.0% of total binder ratio. The appropriate dosage should be determined by preliminary trials.

ARSET SHOT AF's set acceleration effect; it depends on the type, dosage and age of the cement, the shotcrete and the surface temperature to be applied, the layer thickness and the spraying process. The water / binder ratio of the ready-mixed concrete to be used in the wet system and the amount of mixing water of the ready-mixed concrete to be used in the ARSET SHOT AF.

Consumption Dosage

ARSET SHOT AF's accelerating effect depends on the cement type, dosage and age, shotcrete and application area temperature, layer thickness and spraying process. The water/binder ratio of the ready mix concrete for wet application and the mixing water ratio for the dry application affects ARSET SHOT AF's accelerating properties

Method of Application

The right dosing, mixing and nozzle operation is crucial for reaching the required shotcrete quality.

For pumped concrete, maximum particle size (Dmax) is 8 mm water/cement ratio must be lower than 0,48. Suitable plasticizer should be used.

Fresh concrete temperature should be over 15 °C.

Compatibility with Other Admixtures

ARSET SHOT AF can be combined with the following admixtures Laboratory tests should be carried out before use.

- Arstep / Arstep Extra / Degaset Series

Packing

- 200 kg container
- Bulk

Storage and Shelf Life

It should be stored at temperatures between +5°C and +35°C. Under proper storing conditions, the product's shelf life is 3 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use.

Warning

ARSET SHOT AF should be added with the proper dosing unit. The mixing of concrete and proper nozzle process is required. Fresh concrete properties must be appropriated according to the shotcrete equipment, capacity of the equipment, ambient temperature and other conditions.

Safety Precautions

Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.

Responsibility: The information given in this technical data sheet is based on the applications carried out in our field of production and latest technological developments. YAPICHEM KİMYA SAN. A.Ş. is only responsible for the quality of product. YAPICHEM KİMYA SAN. A.Ş. cannot be responsible for the results due to the wrong use of the product and/or apart from the written recommendations regarding the area of use and application method. This technical data sheet makes the prior issues void.